## **Summary of Holiday Weather Extremes**

The holiday season over parts of Central and South Central Texas has brought many extremes in weather that varied from winter to summer like conditions.

The average high and low for late December to early January are listed below for Austin Mabry, Del Rio and San Antonio. This data comes from the 1981 to 2010 Normals released by the National Climatic Data Center.

Location	Dec. 20	Dec. 25	Dec. 30	Jan. 1	Jan. 5
<b>Austin Mabry</b>	62 and 42	61 and 41	61 and 41	61 and 41	61 and 41
Del Rio	63 and 40				
San Antonio	63 and 41	63 and 41	62 and 40	62 and 40	62 and 40

Information on the extremes in temperature across South Central Texas for late December to early January follows.

The coldest weather during the holidays since the late 1800's came in December of 1983 and December of 1989. The coldest Christmas day was during the arctic outbreak of December 1983, when all of South Texas was impacted by a hard freeze. This caused extensive crop and property damage. The high at Austin Mueller Airport on Christmas of 1983 was 25, and the low was 10. At Austin Bergstrom the high December 25, 1983 was 26 and the low was 11. For Del Rio, the high was 31, and the low was 13, and at San Antonio the high was 30, and the low was 11. The coldest daily lows in the December 1983 arctic outbreak for Austin Mueller Airport was 10, for Austin Bergstrom 11, and for Del Rio 13, all on Christmas Day of 1983. For San Antonio the coldest daily low in December 1983 was 9 on December 30th.

The coldest it has been in late December since the late 1800's came during the December 1989 arctic outbreak. On December 23, 1989 the low fell to 4 at Austin Mueller Airport, 6 at Austin Bergstrom, 6 at San Antonio, and to 10 at Del Rio. The low of 10 in Del Rio was an All Time Low at Del Rio from December 1905 to the present. The low of 4 at Austin Mueller Airport, 6 at Austin Bergstrom and 6 at San Antonio was the coldest for the month of December. Some other coldest lows around the area in December 1989 were as follows, Blanco 0 on December 23 and 24; Boerne 2 on December 23; Burnet -4 on December 23; Carrizo Springs 10 on December 23; Crystal City 11 on December 23; Fredericksburg 1 on December 23; Eagle Pass 12 on December 23; 2 miles north of Gonzales 4 on December 23; Johnson City 1 on December 23; 3 miles north northeast of Kerrville 0 on December 23; La Grange 3 on December 23; Llano -1 on December 23 and 24; 3 miles west of Lytle 6 on December 23; New Braunfels 2 on December 23; San Marcos 2 on December 23; and Uvalde Research Center 6 on December 23.

For Austin and San Antonio, the coldest New Years Day came in 1928, when the low and high was 17 and 25 at Austin and 19 and 29 at San Antonio on January 1st. At Austin Bergstrom the coldest New Years Day came in 1943 when the low and high was 25 and 33. At Del Rio the coldest New Years Day of record was on January 1, 1928, when the low was 20 and high was 31, and on January 1, 1947, when the low was 24 and the high was 28.

On the other side of extremes, the warmest Christmas came in 1955, when the high was 90 at Austin Mueller Airport and San Antonio; 91 at Austin Bergstrom; and 87 at Del Rio on December 25, 1955.

The warmest New Years Day of record for Austin, Del Rio, and San Antonio was January 1, 2006. Highs on January 1, 2006 were as follows, 85 at Austin Mabry; 84 at Austin Bergstrom; 83 at San Antonio; and 85 at Del Rio.

Although snow has not fallen so far on Christmas day in the capitol city, Del Rio or San Antonio through Year 2009, it has come close and has been observed during the holidays.

During the 2004 holiday season a snow event came to mainly the southeast part of South Central Texas. From the late afternoon and early evening of December 24th, 2004 to the early morning hours of December 25th, 2004, measurable snow was observed over the southeast part of South Central Texas. The snow was over parts of Atascosa, Wilson, Karnes, Dewitt, Gonzales, and Lavaca counties. The heaviest snow amounts were from the southern part of Atascosa county to Karnes, Dewitt, and Lavaca counties. Snow also fell further south over the coastal bend, and lower Rio Grande valley, and east to parts of southeast Texas. A brief period of snow flurries and sleet were observed over parts of Bexar and Guadalupe counties in the late afternoon to the early evening of December 24, 2004. During this event, snow was not observed at Austin, Del Rio or San Antonio International Airport.

The table below lists the times closest to Christmas and New Years Day, that snow was observed for Austin, San Antonio, and Del Rio.

## For Austin 1906 through 2010

Dec 18, 1906	0.4 inches
Dec 18, 1909	Light snow, no depths available
Jan 3, 1911	0.1 inches
Dec 28, 1925	1.0 inch
Dec 21, 1927	0.6 inches
Dec 21 and 22, 1929	5.5 inches

Dec 21 and 22, 1963 Trace

Dec 22 and 23, 1980 Trace

Jan 2, 1985 3.9 inches

**Dec 26, 1997** Trace

Dec 23 and 24, 1998 Trace

**Jan 1, 2002** Trace

## For San Antonio 1885 through 2010

Dec 18, 1906 3 inches

Dec 28, 1925 1 inch

Dec 21, 1927 0.2 inches

Dec 21, 1929 2.9 inches

Dec 21 and 22 1963 Trace

Jan 2, 1985 2.4 inches

Dec 22, 1989 Trace

**Dec 23, 1990** Trace

## For Del Rio 1906 through 2010

**Dec 18, 1906** Trace

**Jan 2, 1911** Trace

Dec 19 and 20, 1927 0.9 inches

Dec 21, 1929 2.2 inches

**Dec 31, 1946** Trace

Dec. 31, 1946 Trace

Dec 17 and 18, 1964 Trace

Jan 2, 1985 1.2 inches

Dec 22, 1989 Trace

With the December 28, 1925 snow event, New Braunfels had 1/2 inch of snow and Blanco had 2 inches.

With the December 21 and 22, 1929 snow event, New Braunfels had 4.6 inches, Blanco had 7 inches, Burnet had 8 inches, and Llano had 9 inches.

With the December 24 and early morning of December 25, 2004 snow event Kenedy had 6 to 8 inches; Runge 7 inches; Cuero 3 to 6 inches; Yorktown 6 inches; Karnes City 5 inches; between Kenedy and Karnes City 3 to 4 inches; Speaks 2 inches; Falls City 1 inch; and Yoakum 1 inch of snow.

Rainfall in the past has varied from bone dry to floods during the holidays. One of the wettest periods during the holidays came in December 1991, when floods affected the area just before Christmas, associated with the 1991/1992 El Nino. San Antonio had the wettest December in 1991 with 13.96 inches of rain, while at Austin it was the 2nd wettest December with 14.16 inches of rain. Del Rio had the 3rd wettest December in 1991 with 3.06 inches of rain. From December 18th to December 22nd, 1991 Austin had 11.28 inches of rain, San Antonio 11.74 inches, and Del Rio 1.82 inches of rain. Another extensive December flood came in 1913. The wettest December at Austin was in December 1913, when Austin had 16.14 inches of rain. From December 1 to 4, 1913, widespread floods came to Central and Southeast Texas, plus parts of South Central Texas. From December 2nd to December 5th, 1913 San Marcos had 15.50 inches of rain and Austin had 12.16 inches of rain. San Antonio had 3.36 inches of rain from December 2nd to December 5th, 1913.

Severe weather events have also affected the area during the holiday season, while at other times calm weather prevailed. In 1997 severe weather events began in the area around December 20th and continued through March of 1998, when South Central Texas was affected by the 1997 and first half of 1998 El Nino. In late December of 2002, severe weather events affected the area on Monday, December 23rd, 2002 and again on Monday, December 30th, 2002.

During the holiday season in 2003, the weather pattern changed from a dry pattern to a wet and cloudier weather pattern in late December 2003. This wet and cloudier weather pattern extended through the winter and spring of 2004. In late December of 2004 a snow event came to the southeast part of South Central Texas on the evening of December 24th. Skies cleared on December 25th, and dry weather continued for the remainder of December.

In late December of 2005 dry and warm conditions came and this trend continued through early January of 2006. Afternoon highs were in the 70s to near 80 in late December of 2005, and around 80 to the mid 80s for the first 3 days of January

2006. January 1st, 2006 was the warmest New Years Day of record for Austin, Del Rio and San Antonio. Highs on January 1 to 3, 2006 were in the middle 80s. The warmest day in January 2006 was 86 observed at San Antonio on January 2, 2006 and on January 3, 2006 at Austin and Del Rio.

During the 2006/2007 holiday season, rain fell over the area the weekend of December 23rd and 24th, 2006. Windy and cool conditions followed on Christmas day of 2006. In late December of 2006 another rain event came on the 29th and 30th. This changed to dry and cool conditions on New Years Eve December 31st, 2006 and on New Years Day of 2007. The rain and clouds that showed up in late December 2006 intensified in January 2007. A winter precipitation event followed across South Central Texas from Monday, January 15th to Wednesday, January 17th, 2007.

From September 2007 through August 2009, very dry conditions prevailed. This affected the holiday seasons with dry weather in late December 2007 to New Years Day 2008 and in late December 2008 to New Years Day 2009. Sunny and mild days followed by clear and cold nights prevailed in late December of 2007. After warming to the 70s on December 31st of 2007, colder conditions came New Years Day of 2008. Mild conditions prevailed in late December 2008 through New Years Day of 2009. Although a brief period of mostly light rain came in the early morning of December 28, 2008; most of the holiday season in 2008 to New Years Day of 2009 was dry.

In late December 2009 to New Years Day January 1st, 2010, a wide range of weather conditions came. Showers and thunderstorms developed in the evening and night of December 23rd, 2009 to the early morning hours of December 24th. These storms formed ahead of a fast moving and strong cold front that swept across the region in the morning of December 24th, 2009. This brought windy and cold conditions Thursday the 24th, as winds gusted to near 40 to near 50 mph. In addition, in the morning to early afternoon of the 24th, snow flurries were observed over the eastern part of the Hill Country just west of Austin and from Northwest Austin to parts of Williamson County. The colder than usual conditions continued December 25th, 2009, followed by a warming trend in the daytime on the 26th and 27th, as a dry airmass came across the region from the west. Colder weather quickly returned as a wave of colder air came across South Central Texas from the north and northeast the night of the 27th to Monday, December 28th, bringing cooler afternoon highs on Monday December 28th. A late December precipitation making weather system brought moderate amounts precipitation on the 29th. Mostly cold rain fell December 29th, 2009 with highs in the upper 30s to near 40 across the Hill Country to the 40s across South Central Texas. A mix of rain and snow was observed across the Hill Country in the morning. From San Antonio to New Braunfels to Austin and Georgetown, the cold rain was briefly mixed with sleet in the morning of the 29th. By the afternoon and evening the precipitation changed to rain.

A warming trend with sunny afternoons came Wednesday, December 30th and Thursday, December 31st, 2009 followed by cooler conditions in the late afternoon through the evening of the 31st. Highs on December 31st rose to the 70s at many

locations, except for upper 60s to near 70 over the northern Hill Country. After a colder than usual December in 2009, December 31st, 2009 was the warmest day in December 2009 at Del Rio, Hondo, New Braunfels, San Antonio, San Antonio Stinson and Uvalde. A cold front quickly followed, leaving dry and cold weather on New Year's Day 2010, with daytime highs in the 50s.

In December of 2010, little or no rain fell from December 1 to December 20, followed by brief rain events the 24th and the 28th to the early morning of the 29th, as the storm track migrated further south. The most rain in December 2010 fell with a line of showers and thunderstorms on a spring like day Friday, December 24, 2010. A dry and cold day followed on December 25, 2010, with highs in the 40s across the Hill Country to Adjacent parts of Central Texas and in the 50s across South Central Texas, with sunny skies in the day.

The rainfall in late December 2010 brought only brief relief from the dry conditions. A brief warming trend the afternoon of December 29 and 30 ended with a cold front on the 31st. The high of 83 at Del Rio December 30, 2010 was the warmest day of December 2010 at Del Rio, while the high of 81 at San Antonio Stinson was just as warm as December 4 and 21, 2010. The cold front on December 31, 2010 brought dry northerly winds to the region during the day and mild temperatures.

January 2011 began on the 1st with dry and cool conditions, along with sunny skies during the day. A rain event followed on the weekend of January 8 and 9, 2011. The most rain in January 2011 and the best rains since September 2010 came the night of January 8 to the morning of January 9, 2011 and again from Friday, January 14 to January 16, 2011.

The frequent passage of cold fronts in January 2011 limited the duration and magnitude of warming trends. The warmest days of January 2011 came on Sunday, January 30 and Monday, January 31, 2011. A dry and mild air mass on January 30th came across the region from the west and southwest. Mild conditions continued the 31st, in advance of a strong Arctic Cold front that brought much colder weather in early February 2011, and a snow event the night of February 3rd and morning of Friday, February 4th, 2011.